

CLAIMS

What is claimed is:

1. A method of bending Composite Reinforced Pipe (CRP) comprising:
placing heater proximate to a longitudinal location along the pipe where the pipe is to be bent;
heating the pipe;
bending the pipe at the longitudinal location.
2. The method of Claim 1 wherein the pipe is heated such that a composite temperature is slightly below a heat distortion temperature of the composite.
3. The method of Claim 1 wherein the pipe is bent incrementally at a plurality of longitudinally displaced locations.
4. The method of Claim 1 wherein a plurality of bends effect approximately 1° of total bend in a longitudinal length equal to a diameter of the CRP.
5. The method of Claim 3 wherein the longitudinally displaced locations are separated by a distance equal to approximately 1/4 of a diameter of the pipe.
6. The method of Claim 5 wherein the pipe is bent 1/4° at each location.
7. The method of Claim 1 further comprising:
preheating the pipe prior to heating the pipe.
8. The method of Claim 1 further comprising:
capping the pipe to prevent heat loss.
9. The method of Claim 1 wherein the heater is an induction heater.
10. The method of Claim 7 wherein preheating comprises:
introducing hot air into the CRP.
11. An apparatus for bending a section of composite reinforced pipe comprising:
a frame;
a die mounted on the frame;
a pin up shoe for securing the section of pipe against the die;

a stiffback movably mounted on the frame for bending the section of pipe against the die;

a heater for elevating the temperature of the section of pipe; and
means for longitudinally positioning the section of pipe in the apparatus.

12. The apparatus of claim 11 wherein the heater is an induction heater.
13. The apparatus of claim 12 wherein the heater encircles the section of pipe.
14. The apparatus of Claim 11 wherein the die is segmented.
15. The apparatus of Claim 11 further comprising:
an indexing wheel; and
a controller to activate the die responsive to the indexing wheel.
16. The apparatus of Claim 11 wherein the means for longitudinally positioning comprising:
a powered roller to translate the pipe in either a forward or reverse direction.